

IN THE CLAIMS:

Amend the claims as follows:

Claims 1-74. (Canceled).

75. (Currently Amended) ~~A Hepatitis~~ An isolated Hepatitis C virus polynucleic acid, having a ~~acid comprising a nucleotide sequence of which is unique to at least one~~
of the new HCV types 7, 9 or 11, or, ~~to at least one of~~ one of the subtypes 1d, 1e, 1f, 1g,
2e, 2f, 2g, 2h, 2i, 2k, ~~24~~ 2l, 3g, 4k, 4l or 4m, wherein said types or subtypes are
characterized by the following prototype sequences:

SEQ ID NO: 43, 45, 47, 89, 91 or 93 for HCV type 7,

SEQ ID NO: 41 or 95 for HCV type 9,

SEQ ID NO: 99, 101, 103 or 105 for HCV type 11,

SEQ ID NO: 1, 3, 5, 7, 53, 55 or 57 for HCV subtype 1d,

SEQ ID NO: 9, 59 or 61 for HCV subtype 1e,

SEQ ID NO: 11 or 63 for HCV subtype 1f,

SEQ ID NO: 65 or 67 for HCV subtype 1g,

SEQ ID NO: 13, 15 or 69 for HCV subtype 2e,

SEQ ID NO: 17 or 71 for HCV subtype 2f,

SEQ ID NO: 19 for HCV subtype 2g,

SEQ ID NO: 21, 23 or 73 for HCV subtype 2h,

SEQ ID NO: 25 for HCV subtype 2i,

SEQ ID NO: 75 or 77 for HCV subtype 2k,

SEQ ID NO: 79 for HCV subtype 2l,

SEQ ID NO: 81 for HCV subtype 3g,

SEQ ID NO: 27, 29, 31, 33, 35, 37 or 83 for HCV subtype 4k,

SEQ ID NO: 39 or 85 for HCV subtype 4l,

SEQ ID NO: 87 for HCV subtype 4m;

or the complement thereof.

~~when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1; or the complement thereof.~~

76. (Currently Amended) ~~A polynucleic~~ An isolated Hepatitis C virus polynucleic
acid which is selected from the group consisting of

(i) a nucleotide sequence comprising ~~sequences defined by~~ SEQ ID NOs: 1, 3, 5, 7, 9, 11, 13, 15, 13-15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 99, 101, 103, 105,

(ii) a nucleotide sequence comprising at least 5 nucleotides of a nucleotide sequence of (i) wherein the amino acid sequence encoded by said at least 5 nucleotides comprises at least one of the following amino acid residues: I15, C38, V44, A49, P49, Q55, A58, D60, E68, H70, A71 or Q71 or N71, D72, H81, H101, D106, S110, L130, I134, E135, L140, S148, T150 or E150, Q153, F155, D157, G160, E165, I169, F181, T190, T192 or H192, I193, A195, S196, R197 or N197 or K197, Q199 or D199 or H199 or N199, F200 or T200, A208, I213, M216 or S216, N217 or S217 or G217 or K217, T218, I219, A222, Y223, I230, W231 or L231, H232, Q233, E235 or L235, F236

or T236, F237, L240 or M240, A242, N249, I250 or K250 or R250, A252 or C252, I255, L256 or M256, E257, E260 or K260, R261, V268, S272 or R272, I285, F290, A291, A293 or L293, T294, or A294, S295, K296 or E296, Y297 or M297, I299 or Y299, I300, S301, P316, S2646, A2648, G2649, A2650, V2652, Q2653, H2656, K2663 or Q2663, A2667 or V2667, D2677, L2681, M2686 or Q2686, A2692 or K2692, H2697, I2707, L2708 or Y2708, A2709, A2719 or M2719, F2727, T2728 or D2728, E2729, F2730 or Y2730, I2745, V2746 or E2746 or L2746 or K2746, A2748, S2749 or P2749, R2750, E2751, D2752 or N2752 or S2752 or T2752 or F2752 or I2752 or Q2752, D2753 or G2753, D2754, A2755, L2756 or Q2756, R2757, with said notation being composed of a letter representing the amino acid residue by its one-letter code, and a number representing the amino acid numbering as shown in Table 1 ~~part of a polynucleic acid of (i) which is unique to at least one of the new HCV types 7, 9 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1, and~~

(iii) the complement of a ~~the~~ polynucleic acid of (i) or (ii).

77. (Currently Amended) A polynucleic acid according to claim 75, wherein the polynucleic acid is selected from

(i) a polynucleic acid encoding an HCV polyprotein comprising in its amino acid sequence at least one of the following amino acid residues; I15, C38, V44, A49, P49, Q55, A58, D60, E68 ~~or V68~~, H70, A71 or Q71 or N71, D72, H81, H101, D106, S110, L130, I134, E135, L140, S148, T150 or E150, Q153, F155, D157, G160, E165, I169,

F181, T190, T192 or H192, I193, A195, S196, R197 or N197 or K197, Q199 or D199 or H199 or N199, F200 or T200, A208, I213, M216 or S216, N217 or S217 or G217 or K217, T218, I219, A222, Y223, I230, W231 or L231, H232 or A232, Q233, E235 or L235, F236 or T236, F237, L240 or M240, A242, N249, I250 or K250 or R250, A252 or C252, I255 or V255, D256 or M256, E257, E260 or K260, R261, V268, S272 or R272, I285, F290, A291, A293 or L293, T294 or A294, S295, K296 or E296, Y297 or M297, I299 or Y299, I300, S301, P316, S2646, A2648, G2649, A2650, V2652, Q2653, H2656, K2663 or Q2663, A2667 or V2667 ~~V1667~~, D2677, L2681, M2686 or Q2686, A2692 or K2692, H2697, I2707, L2708 or Y2708, A2709, A2719 or M2719, F2727, T2728 or D2728, E2729, F2730 or Y2730, I2745, V2746 or E2746 or L2746 or K2746, A2748, S2749 or P2749, R2750, E2751, D2752 or N2752 or S2752 or T2752 or V2752 or I2752 or Q2752, D2753 or G2753, D2754, A2755, L2756 or Q2756, R2757, with said notation being composed of a letter representing the amino acid residue by its one-letter code, and a number representing the amino acid numbering as shown in Table 1,

~~(ii) a part of said polynucleic acid of (i) which is unique to at least one of the new HCV types 7, 9 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1,~~

~~(iii) (ii) or the complement of the a polynucleic acid of (i) or (ii).~~

78. (Currently Amended) A polynucleic acid according to claim 75, wherein the polynucleic acid is selected from

(i) a polynucleic acid encoding an HCV polyprotein comprising in its amino

acid sequences at least one amino acid sequence chosen from the group consisting of the amino acid sequences having SEQ ID NOs: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 40, 42, 44, 46, 48, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 100, 102, 104 or 106,

(ii) a nucleotide sequence comprising at least 5 nucleotides of a nucleotide sequence of (i) wherein the amino acid sequence encoded by said at least 5 nucleotides comprises at least one of the following amino acid residues: I15, C38, V44, A49, P49, Q55, A58, D60, E68, H70, A71 or Q71 or N71, D72, H81, H101, D106, S110, L130, I134, E135, L140, S148, T150 or E150, Q153, F155, D157, G160, E165, I169, F181, T190, T192 or H192, I193, A195, S196, R197 or N197 or K197, Q199 or D199 or H199 or N199, F200 or T200, A208, I213, M216 or S216, N217 or S217 or G217 or K217, T218, I219, A222, Y223, I230, W231 or L231, H232, Q233, E235 or L235, F236 or T236, F237, L240 or M240, A242, N249, I250 or K250 or R250, A252 or C252, I255, D256 or M256, E257, E260 or K260, R261, V268, S272 or R272, I285, F290, A291, A293 or L293, T294, or A294, S295, K296 or E296, Y297 or M297, I299 or Y299, I300, S301, P316, S2646, A2648, G2649, A2650, V2652, Q2653, H2656, K2663 or Q2663, A2667 or V2667, D2677, L2681, M2686 or Q2686, A2692 or K2692, H2697, I2707, L2708 or Y2708, A2709, A2719 or M2719, F2727, T2728 or D2728, E2729, F2730 or Y2730, I2745, V2746 or E2746 or L2746 or K2746, A2748, S2749 or P2749, R2750, E2751, D2752 or N2752 or S2752 or T2752 or F2752 or I2752 or Q2752, D2753 or G2753, D2754, A2755, L2756 or Q2756, R2757, with said notation being composed of a letter representing the amino acid residue by its one-letter code, and a number representing the amino acid numbering as shown in Table 1 a part of said polynucleic

~~acid of (i) which is unique to at least one of the new HCV types 7, 9 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1,~~

(iii) or the complement of a the polynucleic acid of (i) or (ii).

79. (Currently Amended) A polynucleic acid according to claim 75, wherein the polynucleic acid is selected from

(i) a polynucleic acid encoding an HCV polyprotein comprising in its amino acid sequence at least one amino acid sequence chosen from the group consisting of SEQ ID NOs: 107, 109, 110, 112-116, 120-133, 135-142, 144-147, 149-165, 167, 169-181, 183, 185-200, and 202-207 ~~the amino acid sequences having SEQ ID 107 to 207,~~

~~(ii) a part of said polynucleic acid of (i) which is unique to at least one of the new HCV types 7, 9 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1,~~

~~(iii)~~ (ii) or the complement of a the polynucleic acid of (i) ~~(ii) or (iii).~~

80. (Previously Presented) A polynucleic acid according to any one of claims 75 to 79 further comprising at least one of a HCV 5' UR nucleic acid sequence, a HCV Core/E1 nucleic acid sequence, a HCV NS4 nucleic acid sequence, and a HCV NS5B nucleic acid sequence.

81. (Currently Amended) A recombinant polypeptide encoded by a polynucleic acid according to any of claims 75 to 79, ~~or a part thereof which is unique to at least one of the new HCV types 7, 9 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO. 1.~~

82. (Currently Amended) A method for production of a recombinant polypeptide, comprising:

transformation of ~~a~~ an appropriate cellular host with a recombinant vector, in which a polynucleic acid according to any one of claims 75 to 79 has been inserted under the control of ~~the appropriate~~ regulatory elements, the polynucleic acid thus being an insert,

culturing said transformed cellular host under conditions enabling the expression of said insert, and

harvesting said polypeptide.

83. (Previously Presented) A recombinant expression vector comprising a polynucleic acid according to any one of claims 75 to 79 operably linked to prokaryotic, eukaryotic or viral transcription and translation control elements.

84. (Previously Presented) A host cell transformed with a recombinant vector according to claim 83.

85. (Currently Amended) A peptide corresponding to an amino acid sequence encoded by one of the polynucleic acids according to any one of claims 75 to 79, ~~with said peptide comprising an epitope which is unique to at least one of the new HCV types 7, 9 or 11, or, to at least one of the subtypes 1d, 1e, 1f, 1g, 2e, 2f, 2g, 2h, 2i, 2k, 2l, 3g, 4k, 4l or 4m, wherein when the sequence is unique to at least subtype 1d the sequence is at least 96% identical to SEQ ID NO: 1.~~